MESSAGE FROM THE CHAIRMAN:
HURRICANE SEASON IS UPON US!
-SCOTT T. REEVES, MD, MBA

Recently, tropical storms Alberto and Beryl have come close to Charleston as they headed up the Eastern seaboard. I cannot remember when we have had two tropical storms this early in the year. Maybe there is something to this global warming thing. I am sure that Scott Walton and others took the opportunity to catch some waves on Folly.

This event reminded me that it is never too early to make hurricane preparations, just in case. The department has a wonderful resource for employees that can be found on our intranet. To download our department’s disaster plan, please click here.

With the addition of our critical care fellowship, the Executive Committee has revised the emergency staffing model presented on the next page.

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**DEPARTMENT WEATHER EMERGENCY STAFFING**

1. During weather emergencies, the **Rutledge Tower** ambulatory surgery facility will be closed to surgical procedures.

2. The **University Hospital Operating Room** will be staffed by the following members of the Activation Team (designated essential personnel):

   - **Faculty**: Two faculty scheduled to cover the date of the anticipated Weather Emergency (Step 3) will be assigned in-house call.
     - If the scheduled in-house call attending is pediatric capable (peds, peds CT) then the second in-house attending will be the **Bold 1** faculty.
     - If the in house call attending is not peds capable then the second faculty in-house person will be determined by the following order. The first available pediatric capable faculty will assume the in-house duty.

   - **Bold 1**(peds, peds CT)
   - **Bold 2**(peds, peds CT)
   - **Peds**

   - **Residents**: The designated CA-3, CA-2 and two CA-1 call residents scheduled for duty on that date. The liver call resident will also come in-house.

   - **CRNAs**: The scheduled 24 hour call CRNA or the late CRNA when a 24 hour individual is not scheduled. A second 24 hour CRNA volunteer will be designated. The Chief CRNA will make this determination during the Step 1 (Weather Watch) planning stage.

   - **Anesthesia Technicians**: Two anesthesia technicians will remain in the hospital commencing with Step 3 conditions (Weather Emergency). These individuals will be named by the Anesthesia Technician supervisor from anesthesia tech “Team A” during the Step 3 planning phase.

3. The **Ashley River Tower Operating Room** will be staffed by the following members of the Activation Team (designated essential personnel):

   - **Faculty**: The cardiothoracic anesthesia and critical care attending scheduled to cover the date of the anticipated Weather Emergency (Step 3 above).

   - **Residents**: Upper level ART on call or backup resident (cannot also be assigned at the University Hospital). The MSICU resident on call will also report for duty.

   - **CT and Critical Care Fellow**: The on call CT and critical care fellows will stay in-house. If no CT and Critical Care fellows are assigned on call, one of the fellows will be assigned as determined by the CT and CC Fellowship Program Directors.

   - **CRNAs**: The scheduled 24 hour call CRNA or the late CRNA when a 24 hour individual is not scheduled. The Chief CRNA will make this determination during Step 1 (weather watch) planning stage.

After the “all clear” notification is made and “return to work” is mandated via the website or above telephone call line, the recovery team is expected to return to the hospital to relieve the Activation Team.
DEPARTMENT WEATHER EMERGENCY STAFFING

IV. Post-Storm Staffing:
Reinstitution of surgical services following the weather emergency will be contingent upon the demand for service, sustained structural damages, impediments to emergency services access, and the ability to resume clinical activities. The Medical Center Command Center will determine whether operations will resume at normal or reduced capacity. This information will be accessible through the hospital’s aforementioned designated telephone line or the OR emergency line. Continuation of “emergency-only” surgical operations will be covered by the in-house storm call team until they can be replaced by the in-house and pediatric call attendings scheduled to cover on the date facility re-access is permitted. The call team should plan for the possibility of staying in-house for up to 72 hours post-storm.

A. Once a reduced work-force is cleared to return to work, the following recovery phase response will ensue:

1. Severe damage, limited access: Scheduled in-house and pediatric call attending for that date of coverage will return, planning to remain for 24 hours
2. Moderate damage, reduced work force: 10-hour shift personnel and designated in-house call attending only (date specific).
3. All Faculty, CRNAs, Residents and Support staff are expected to return to work within 24 hours of the passing of the storm unless otherwise stated within the communication systems.

JOINT COMMISSION OF HOSPITAL ACCREDITATION (JCAHO)
EXPECTATIONS OF MEDICAL STAFF DURING A DISASTER

MUSC Medical Center emergency response priorities are:

- Ensure Life Safety – protection of life and care for the injured
- Contain hazards
- Protect critical infrastructure, facilities, vital records, other data
- Resume the delivery of patient care
- Support the overall community response
- Restore essential services/utilities
- Provide crisis public information

All privileged Medical Staff are expected to continue normal responsibilities and/or assigned duties, unless instructed otherwise. Medical Staff members should not use telephones or elevators except for emergency needs or activities related to the emergency.

If on-duty, members of the Medical Staff should report to their designated department or unit. The senior staff member of the area will be informed of how to respond to the incident and how to use available staff and resources. Attending physicians and residents are expected to remain on duty until appropriate relief is provided or until instructed otherwise.

If off duty, members of the Medical Staff should await telephone, radio, Simon pager, or television notification for information regarding reporting to the Medical Center. Unless directed otherwise, these practitioners are expected to report to work as scheduled.

Unless otherwise specified in the Hospital’s Emergency Operations Plan, special care units (Medical Intensive Care, Surgical Trauma Intensive Care, etc.) will continue normal activities. Direct admissions of patients to these units will be made as necessary and deemed appropriate according to the incident.
PACEMAKER MANAGEMENT
BY: ERIC NELSON, DO

This past year the American Society of Anesthesiologists and the Heart Rhythm Society developed an expert consensus regarding the management of patients with pacemakers, implantable defibrillators, and arrhythmia monitors.

The full paper can be found at this link: http://www.hrsonline.org/ClinicalGuidance/cieds_consensus-statement.cfm

I thought it was timely to pass along this paper and go over some highlights, as this month Dr. Kelly Grogan will unveil our department’s new policy on how to deal with patients with implanted cardiac devices.

First, patients who have pacemakers should have the devices evaluated every 12 months and those with a defibrillator should have the device evaluated every 6 months. This is to evaluate battery life, and to make sure the device is functioning properly. While going over the interrogation records of the device, it is important to note if the magnet mode is active and what the magnet mode is for that particular device (but more on this later).

Other important aspects of managing these patients is to determine why the device was originally placed, where in their body the device is, and whether or not they are pacemaker dependent.

Some things to keep in mind during a procedure on a patient with a device: If electrocautery is going to be used, bipolar is preferred to monopolar. If monopolar cautery is used, try to place the bovie pad in a location so the current from the bovie tip to the pad won’t pass over the device as this has been shown to damage implanted cardiac devices.

Typically if the surgery is below the umbilicus, nothing has to be done with the device; however a magnet should be available. For surgery above the umbilicus, the defibrillator should be turned off and external defibrillator pads placed so the patient is not shocked inappropriately. Also, if a pacemaker is present it should be set to an asynchronous mode.

If a magnet is utilized during a procedure, the patient’s device does not have to be interrogated in the postoperative period unless there is a high chance of interference with the device, such as chest compressions, external defibrillation, or surgery in the thoracic region. If the device was reprogrammed preoperatively, it should be programmed to the original settings postop.

These are just a few of the highlights on perioperative management of patients with implantable cardiac devices. I encourage you to read the HRS/ASA paper to know how to manage these patients. Also, keep your eye out for our department’s new policies from Dr. Grogan.

I am also a resource in this area as I have been taking classes and getting in-services on various devices from both cardiology and the device makers themselves. Please don’t hesitate to contact me if you have any questions regarding the management of these patients.
Dr. Fred Guidry, Dr. Joe Whiteley, and I had the opportunity to go to the World Congress of Anesthesiologists held in Buenos Aires in March.

The congress is organized by the World Federation of Anesthesiologists. Almost every country has its own society of anesthesiologists, and every 4 years the WFSA organizes an educational, political and social meeting. This meeting was attended by 9,490 delegates (including 590 speakers) from 125 countries.

The WFSA is ultimately governed by its General Assembly, which meets twice during each World Congress. Each country’s society has one delegate for every one-thousand members. It is always eye opening to learn about the difference among societies. For example, some societies have their membership revoked at each meeting since they can’t pay their dues or because the WFSA can’t find anyone in the country to contact! The day to day activities of the WFSA are managed by an Executive Committee, which consists of the officers and twelve elected representatives for designated geographic regions.

The aim of the World Federation is to improve patient care in anesthesiology by sharing the members’ knowledge and understanding of the diverse environments in which we all work. It is a great mixture of science, research and education with plenty of clinical applications. Presentations, workshops and lectures were held by experts from all over the world with 620 sessions, 756 digital posters and 39 workshops. The exhibit hall had 114 companies, and I found it to be particularly interesting to see what is not available in the US due to FDA restrictions.

The lecture topics reflected the mission to share how our fellow anesthesiologists from around the world practice: Anesthesia update from China; specific anesthesia risks and considerations providing anesthesia in La Paz, Bolivia, a city with more than 2 million people living 3,500 m above sea level; the latest on non-invasive cardiac output monitoring and neuromonitoring; new pharmaceuticals for critically ill patients in cardiac failure; pharmacogenomics and drug response; and the presentation of a low-cost pulse oximeter (Life-Box) invented to improve anesthesia safety around the globe. These were only a few topics on the busy 5-day lecture schedule.

I was happy when I received the acceptance letter for my presentation about homocysteine induced cardiac dysfunction in a middle aged rodent model. The session was chaired by Professor Pablo Motta, a pediatric cardiac anesthesiologist from Texas Children’s Hospital at Baylor College. My fellow presenters came from Denmark, Japan, Czech Republic, Belgium, and the United States (Boston). We had a nice chat after the session that included sharing our “daily life in the hospital” stories.

Buenos Aires has many things to offer: Tango, outstanding food and red wines from the wine region of Mendoza, wonderful architecture, and neighborhoods with galleries and cute boutiques. March is the beginning of fall in South America, perfect weather for taking walks in the city and dining outside.

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The next World Congress in 2016 will be held in Hong Kong, and we just heard that the 2020 meeting will be held in Prague, Czech Republic. The competition between the societies to host the next meeting is quite intense, and Prague won out over a number of sites, including London and San Francisco.

In January I received an invitation from my friend and plastic surgeon Dr. Larry Florman to join him and a team of ENT and pediatric surgeons to travel to Cambodia for a medical mission. Larry warned me: better be ready for an adventure! We had a tight schedule after flying into Phnom Penh. Appointments at five hospitals were scheduled. We screened many patients, and burn and landmine victims with terrible open wounds and lacerations still make a high percentage of the trauma patients coming into the hospital. Patients with facial ulcerating tumors, at stages we rarely see at home any more, were a challenge for both the surgeons and the anesthesia team.

I have the greatest admiration for my Cambodian colleagues. On a daily basis, they have to deal with shortages in supplies, medications, and equipment to get their patients through anesthesia. Anesthesia presence is precious in Cambodia and availability of anesthetics dictate the OR schedule. So we heard it from our surgeons in Cambodia too: it’s always anesthesia. Anesthesia supply shortages are really different from what we are used to. Halothane was the only inhalational agent, and there was a decent amount of expired lorazepam, ketamine, thiopental and fentanyl. I discovered that even the 2007 expired ketamine works quite well. We tried to avoid paralytics whenever we could in order to save the paralytic and the reversal for the “real cases.” Monitoring was unfortunately not even basic: There were pulse oximeters and a blood pressure cuff but there was no EKG (due to lack of stickers), endtidal CO2 or gas monitoring. Soda lime was dried out or out of supply. We would have liked to run high oxygen flow with the gas in those situations, but we couldn’t because we needed to save inhalational agent. The result was that most of our patients with OR times longer than two hours were in CO2 narcosis, and there wasn’t much we could do.

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A “ventilator” was needed in PACU, which meant we needed a nurse using an open circuit system with 100% O2 to ventilate the patient until they woke up. So a “ventilator” is actually a job description!

The anesthesia attendings are joined by a fourth-year medical student, and every medical student has to assist an attending in his/her fourth year. The anesthesiologist’s training includes at least one year of training outside of Cambodia; some went to Korea, Thailand, Singapore or Europe. (Wouldn’t that be great if our programs would require one year abroad, too?) I met colleagues who were fluent in French and German, which was fun.

Lunch breaks with the operating room teams consisted of fruits and freshly baked baguettes and croissants from street vendors – there is no doubt about the French influence from colonial days in the Cambodian cuisine. We also had the chance to eat traditional dishes, but I passed on the fried spiders and marinated frogs. I did try the crickets, and they tasted like potato chips.

Dr. Theavy Mok, a Cambodian plastic surgeon and chair of Operation Smile in Cambodia, invited us to teach and lecture at the Private International University and Medical School in Phnom Penh. All 4th—6th year medical students showed up for the lecture series in perfectly pressed white blouses/shirts and blue skirts/pants. We felt like we were teaching in a British boarding school! Medical school takes 6 years, and the students at the International University are used to having their curriculum taught in Cambodian/Khmer, English and French.

Our next appointment was in Siem Reap, six hours north of Phnom Penh. We visited the Children’s Hospital there, which was founded and initially funded by donations from a Japanese photographer living in New York. The medical director is an ER physician from Louisville, KY, who knew my team members. (Louisvillians are everywhere.) The Children’s hospital is very busy; they see about 400 children every day. Pneumonia, malnutrition, HIV and TB are the biggest problems, but they are also able to schedule cardiac procedures. A pediatric cardiac surgeon from Singapore brings in a team with everything needed (staff, material, and medicine) in a defined time period and operates as much as he can. The hospital also teaches in the community with a focus on nutrition, clean water sources, and preventive medicine.

Siem Reap is also known for the famous temple complex of Angkor Wat (pictured below). There are beautifully carved temples more than 1000 years old built by men to worship Hindu deities and Buddha. No one can explain how human beings were able to build these temples with the means available 1000 years ago, and that is why the complex is on the list of the wonders of the world.

I had a wonderful trip, was inspired in so many ways and made many new friends! I already forgot how tired I was from all the halothane I inhaled, or how exhausted I was from the tropical heat inside and outside the OR. What I remember is a beautiful country rich in culture and people, and I am very grateful that I had the opportunity to visit and was so openly welcomed to teach and work as an anesthesiologist in Cambodia.
Keith Carver is excited to be participating in the FAER Medical Student Anesthesia Research Fellowship this summer. Keith is a native of Seneca, South Carolina, which is located approximately one hour west of Greenville at the base of the Blue Ridge mountain chain. He graduated from the College of Charleston in 1999 with a B.S. in biology, from there he went on to graduate from the College of Dental Medicine at MUSC in 2003. Following this, he completed specialty training in endodontics along with an M.S. in oral biology in 2005 at The Ohio State University. Keith remained in private practice limited to endodontics in Clemson, SC until starting medical training at MUSC in 2011. He is a very blessed husband and father. Keith’s wife Leslie, is a teacher of deaf and hard of hearing students at Westview Primary School in Goose Creek, SC. Their son Sam, is three years old and the pride of their lives.

Keith’s previous experiences in dentistry, particularly in endodontics which is heavily focused on pain control, has greatly broadened his interests in anesthesia. Acute and chronic pain can manifest with serious debilitating consequences and delay healing. Therefore, managing pain post-operatively is paramount to the success of treatment. The area of pain control has been a primary interest of his for many years, and Keith is eager to participate in research this summer that will hopefully lead to the development of novel interventions to control post-operative pain and improve the quality of life for many patients. I am also enthusiastic to learn more about the specialty of anesthesia and perioperative medicine, and the day to day duties of an anesthesiologist. This program will provide a unique insight into an intriguing specialty that he considers a top career choice.

Keith would like to thank the Department of Anesthesia and Perioperative Medicine at MUSC for hosting this program and for giving him the opportunity to participate. He is humbled by it, and looks forward to working with everyone in the department.

Alex McGaughy has just completed his first year of medical school at MUSC. He is from eastern North Carolina in the city of Kinston, which is about 45 minutes south of Greenville, NC. Following high school graduation, Alex attended North Carolina State University and majored in Biomedical Engineering. During his time at NCSU, Alex’s family moved to Summerville, SC, which played a big influence in his decision to attend medical school here at MUSC. Between NCSU graduation in December 2010 and enrollment at MUSC last August, Alex worked as a lab manager and assistant research scientist at Grifols Inc. (formerly known as Talecris), a pharmaceutical company in Raleigh, NC.

He has always been interested in anesthesiology, and hopes that through the FAER MSARF summer research program he will learn quite a bit about what the field truly entails. Ultimately, Alex is undecided on which medical field to pursue following graduation, but anesthesiology is a strong possibility. He is very excited about this summer, and looks forward to working in the Department of Anesthesia and Perioperative Medicine!
Samkon Gado is a rising 2nd year medical student and was born and raised in Nigeria. He came to America when he moved to Columbia, SC at around 9 years of age. He attended Liberty University and graduated in May 2005. Samkon met his wife Rachel in 2009, and they were married in 2010. She’s employed at Charleston Southern University where she is a Chemical Safety officer and Lab Manager.

In addition to becoming familiar with the research process, Samkon is looking forward to the exposure in the clinical setting. As he works with Dr. McEvoy and the anesthesia department, he intends to deepen his understanding of clinical medicine and continue developing the critical thinking skills that are essential in both the research and clinical setting. He considers this an incredible prospect and is thankful to all those involved in giving him this opportunity.

Matthew Parks is a third year medical student here at MUSC. He was born in Augusta, GA and spent his childhood in Tampa, FL, Austin, TX, and Spartanburg, SC before his undergraduate work at Clemson University. Matthew graduated from Clemson in December 2008, and worked in a small pharmacy in downtown Clemson until marrying his beautiful bride Suzanne after she graduated from Clemson in May 2009. She is a Ph.D. student at MUSC and they have really enjoyed their time here in Charleston. During his free time he and his wife enjoy backpacking, adventuring at the beach, playing disc golf, and spending time with a great community of friends in town.

This summer Matt looks forward to working with Dr. McEvoy on patient safety and simulation research. He is ready to learn about the process of research and how to present data well in order to affect meaningful change in clinical practice. He is also excited about the opportunity to work with mentors who have much to teach. He states he had a wonderful experience during his third year selective and plans to pursue a career in anesthesia. Matt would like to thank the Department for this opportunity and looks forward to meeting many of us over the coming months.
Dr. Carlee Clark was chosen through a competitive process to attend the AAMC Early Career Women Faculty Professional Development Seminar on July 7-10, 2012. This seminar is for women primarily at the assistant professor level and is designed to provide an introduction to the knowledge and skills needed to follow the path to leadership in academic medicine. Detailed information on this program can be found at: https://www.aamc.org/members/gwims/profdev/. Our dean, Dr. Etta Pisino, has provided a match for departmental funds to defray the registration fees, travel, and lodging for up to three early career faculty women from the College of Medicine. The department will utilize the Joanne Conroy Leadership Development Endowment to obtain our match. Congratulations to Carlee for being chosen!

It is with regret that we announce that after 9 years with the Department of Anesthesia, Donna Hoffman will be leaving us to join the Department of Urology. Donna has been a great asset to the department and will surely be missed. We wish her all the best in this new chapter of her career. Congratulations Donna on your new position!

State of the Department Address
Date: July 10, 2012
Location: Room 110 of the Bio Engineering Building.
GRAND ROUNDS FOR MONTH OF JUNE

GERIATRIC

“Perioperative Cognitive Decline”
June 5, 2012
Tim Heinke, MD
Medical University of South Carolina
CA-3 Resident, Chief Resident for Academic Year 2011-2012

“M&M”
June 12, 2012
Susan Harvey, MD
Medical University of South Carolina
Vice Chair for Clinical Operations
Medical Director, University Main Operating Rooms

“Outcome in Geriatric Orthopedic Surgery: Can We Make a Difference With Anesthetic Type?”
June 19, 2012
Tom Epperson, MD
Medical University of South Carolina
Assistant Professor

“Ethical Dilemmas in the End of Life Geriatic Care”
June 26, 2012
A. Cue Carlisle, PhD, MD
San Francisco General Hospital and Trauma Center
Associate Dean
I HUNG THE MOON
Don’t forget to nominate your co-workers for going ‘Beyond the Call of Duty’. I Hung The Moon slips are available at the 3rd floor front desk, and may be turned in to receptionist or Kim. Thanks so much!!

Kathy Kriegar: Learning the ins and outs of NORA in record time. Good to have you as part of the team!

Ken Grismore: Consistently goes above and beyond to keep NORA running smoothly and putting the patients first.

Dawn Leberknight: “I absolutely love working with Dawn. You really found a good one in her!” (GME Office)

Save the Date!
Resident Graduation: June 22, 2012
Location: Charles Towne Landing.

Holiday Party: December 1, 2012
Location: Carolina Yacht Club.

June 2012 Standard of the Month

AIDET
Acknowledge the person
Introduce myself
Establish a Duration
Provide an Explanation and say “Thank You”

We Would Love to Hear From You!
If you have ideas or would like to contribute to Sleepy Times, the deadline for the July edition will be June 25, 2012.